Remarks

The present application was filed August 31, 2001 with original claims 1-30. The Office Action (Paper No. 3) mailed November 10, 2003 rejected claims 1-6 and 9-30, and objected to claims 7 and 8.

The Applicant has provided certain amendments to the claims, cancelled some claims, and filed new claims 31-42. The amendments are made solely to make explicit that which was before implicit, and to more particularly point out and distinctly claim that which the Applicant considers to be patentable subject matter of the present invention. These amendments are proper, do not introduce new matter, do not narrow the scope of the claimed subject matter, and place the application in proper condition for reconsideration.

Rejection of Claims Under 35 U.S.C. §102(e)

The Office Action rejected claims 1-6 and 9-30 as being anticipated by U.S. Patent No. 6,384,995 issued to Smith ("Smith '995"). This rejection is respectfully traversed.

Claim 1

Smith '995 cannot sustain the Section 102 rejection because it does not disclose or suggest all the elements of claim 1. Namely, claim 1 recites at least the following: "*imaging a characteristic size of the defective region....*"

This language requires the method to provide an image associated with a characteristic size of the defective region. This language is supported by the illustrative embodiments of the present invention including, without limitation, three-dimensional images such as in FIG. 2 and the associated description thereof, as well as two-

dimensional images such as in FIGS. 3, 4, 6, 7 and 9 and the associated description thereof.

Smith '995 discloses graphical images only in describing the harmonic ratio flyheight (HRF) signature in relation to determining a pass/fail condition of the media: "Each of the two output nodes corresponds to one of the two possible conclusions to be drawn from the data, either that a surface asperity exists or that some other defect exists." (Smith '995, col. 7 lines 42-46) Particularly, FIGS. 5A and 5B represent signatures associated with an occurrence of a surface asperity, and FIGS. 6A and 6B represent signatures associated with disc irregularities other than surface asperities. (Smith '995, col. 8 lines 5-36)

Smith '995 is silent regarding the claimed feature of imaging a characteristic size of the defective region. As such, it cannot sustain the Section 102 rejection. The amendments to claim 1 broaden the scope of the claimed invention in that the originally recited "assigning a category" is not necessary for novelty over the art of record. Particularly, the amendments to claim 1 do not narrow the claim scope in view of a rejection over prior art. Reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

Claim 25

Smith '995 cannot sustain the Section 102 rejection because it does not disclose or suggest all the elements of claim 25. Namely, claim 25 recites at least the following: "*means for assigning a category for the defective region....*"

Proper construction of this means-plus-function claim considers the structure disclosed for performing the function of assigning a category of defect to the defective region. A plain reading of the present disclosure reveals the structure to be the read/write head in conjunction with the controller, which cooperate in combining the

readback signals in imaging a characteristic size of the defective region. Smith '995 is silent regarding structure that images a characteristic size of the defective region; as discussed above, Smith '995 contemplates whether a surface asperity exists or not. In fact, Smith '995 discloses making an acceptance decision not based on size of the defective region, but rather on the number of defects detected:

> Typically, an assembly which exhibits no surface asperities, but does have some magnetic defects, is acceptable for shipment to the customer. In this case, the drive electronics is capable of remapping defective sectors to avoid the problem, as is known in the art. However, if the number of magnetic defects is sufficiently large, the head/disk assembly may be rejected on this ground as well. (Smith '995 col. 10 lines 52-59, emphasis added)

The pass/fail solution offered by Smith '995 does not provide any mechanism for learning root-cause information for the defect associated with the characteristic size of a defective region. The present invention as claimed by claim 25 is a patentable improvement over this and other known solutions.

Smith '995 is silent regarding means for assigning a category to a defect by imaging a characteristic size of the defect. As such, it cannot sustain the Section 102 rejection. Reconsideration and withdrawal of the rejection of claim 25 are respectfully requested.

Claims 2-6, 9-24, and 26-30

Claims 3, 6, 14, 16, and 18-24 have been cancelled, obviating the rejection. Claims 2, 4, 5, 9-13, 15, 17, and 26-30 are allowable as dependent claims depending from an allowable independent claim, for reasons above, and providing additional limitations thereto. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

Allowable Subject Matter

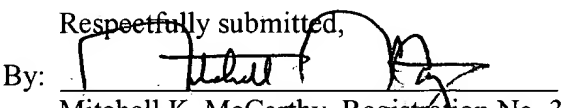
The Applicant gratefully acknowledges the indication of allowable subject matter in claims 7 and 8. For the reasons above, however, the broader independent claim from which claim 8 depends is allowable. As such, the Applicant has elected not to place claim 8 in independent form.

The Applicant agrees with the Examiner's statement of reasons for allowable subject matter to the extent that the claims of the present invention are patentable over the references in the record. The Applicant expressly traverses the Examiner's statement of reasons for allowable subject matter to the extent that any comment is intended or has the effect of limiting a claim scope, explicitly or implicitly, by not reciting verbatim the respective claim language, or is intended or has the effect of limiting a claim scope by stating or implying that all the reasons for patentability are in any way fully enumerated.

Conclusion

This is a complete response to the Office Action mailed November 10, 2003. The Applicant respectfully requests that the Examiner enter the above amendments, reconsider the application and allow all of the pending claims. The Examiner is invited to contact the below signed Attorney should any questions arise concerning this response.

Respectfully submitted,

By: 

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